

a fourth step of patterning said semiconductor film to form at least first and second semiconductor islands after the irradiation of the laser beam, and

a fifth step of forming at least first and second thin film transistors, using said at least first and second semiconductor islands,

wherein a pixel matrix circuit comprises said first thin film transistor and a driver circuit comprises said second thin film transistor, and

wherein said laser beam has an irradiation area of 10 cm^2 or more.

3. (Amended) A method of manufacturing a semiconductor device, comprising:

a first step of forming a semiconductor film on a substrate having an insulating surface;

a second step of holding a catalytic element that promotes the crystallization of said semiconductor film in contact with an entire surface of said semiconductor film;

*E*¹ a third step of irradiating a laser beam shaped in a rectangle or a square from one side of said semiconductor film toward another side thereof while moving said substrate to sequentially crystallize said semiconductor film to form a crystalline semiconductor film,

a fourth step of patterning said semiconductor film to form at least first and second semiconductor islands after the irradiation of the laser beam, and

a fifth step of forming at least first and second thin film transistors, using said at least first and second semiconductor islands,

wherein a pixel matrix circuit comprises said first thin film transistor and a driver circuit comprises said second thin film transistor, and

wherein said laser beam has an irradiation area of 10 cm^2 or more.

20. (Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising amorphous silicon on an insulating surface;

providing an entire surface of said semiconductor film with a crystallization promoting material comprising a metal;

crystallizing said semiconductor film by irradiating said semiconductor film with a pulsed laser beam,

patterning said semiconductor film to form at least first and second semiconductor islands after the irradiation of the laser beam, and

forming at least first and second thin film transistors, using said at least first and second semiconductor islands,

wherein a pixel matrix circuit comprises said first thin film transistor and a driver circuit comprises said second thin film transistor,

wherein said laser beam has a pulse width of 200 nsec or more, and

wherein said laser beam has an irradiation area of 10 cm² or more.

21. (Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface;

providing an entire surface of said semiconductor film with a crystallization promoting material comprising a metal;

crystallizing said semiconductor film by irradiating said semiconductor film with a pulsed laser beam having a square shape cross section,

patterning said semiconductor film to form at least first and second semiconductor islands after the irradiation of the laser beam, and

forming at least first and second thin film transistors, using said at least first and second semiconductor islands,

wherein a pixel matrix circuit comprises said first thin film transistor and a driver circuit comprises said second thin film transistor, and

wherein said laser beam has a pulse width of 200 nsec or more, and an irradiation area of said laser beam is 10 cm² or more.
